

The Claims

1. (Currently amended) One or more computer-readable media having stored thereon a computer program that, when executed by one or more processors of a computing device, causes the one or more processors to perform acts including:

transmitting a request for an enrollment certificate for a virtual private network to a registration authority operating independently of a certificate authority, the enrollment certificate having an extension added to it by the registration authority on behalf of the computing device.

2. (Original) One or more computer-readable media as recited in claim 1, wherein the computer program further causes the one or more processors to transmit additional requests regarding maintaining enrollment in the virtual private network to the registration authority.

3. (Original) One or more computer-readable media as recited in claim 1, wherein the computing device comprises a router.

4. (Currently amended) A method implemented at a registration authority, the method comprising:

receiving, from a device, a get certificate authority certificate request;

generating a response including a certificate of the registration authority that is used by the registration authority to digitally sign or encrypt data; and

returning the response to the device.

5. (Original) A method as recited in claim 4, wherein the device comprises a router.

6. (Original) A method as recited in claim 4, wherein the get certificate authority certificate request identifies a dynamically linked library (DLL) that is the registration authority.

7. (Canceled).

8. (Original) A method as recited in claim 4, wherein the response includes both a signing certificate of the registration authority and an encryption certificate of the registration authority.

9. (Original) A method as recited in claim 4, wherein the response further includes a certificate chain of the certificate authority.

10. (Currently amended) One or more computer-readable media having stored thereon a plurality of instructions that, when executed by one or more processors at a registration authority, causes the one or more processors to perform acts including:

receiving, from a device, a get certificate authority certificate request;

generating a response including a certificate of the registration authority that is used by the registration authority to digitally sign or encrypt data; and returning the response to the device.

11. (Original) One or more computer-readable media as recited in claim 10, wherein the device comprises a router.

12. (Original) One or more computer-readable media as recited in claim 10, wherein the get certificate authority certificate request identifies a dynamically linked library (DLL) that is the registration authority.

13. (Canceled).

14. (Original) One or more computer-readable media as recited in claim 10, wherein the response includes both a signing certificate of the registration authority and an encryption certificate of the registration authority.

15. (Original) One or more computer-readable media as recited in claim 10, wherein the response further includes a certificate chain of the certificate authority.

16. (Previously presented) A method as recited in claim 4, wherein the generating comprises generating the response including the certificate of the registration authority instead of a certificate of the certificate authority.

17. (Previously presented) One or more computer-readable media as recited in claim 10, wherein the generating comprises generating the response including the certificate of the registration authority instead of a certificate of the certificate authority.